Gulf of Mexico Harmful Algal Bloom Bulletin

Region: Texas

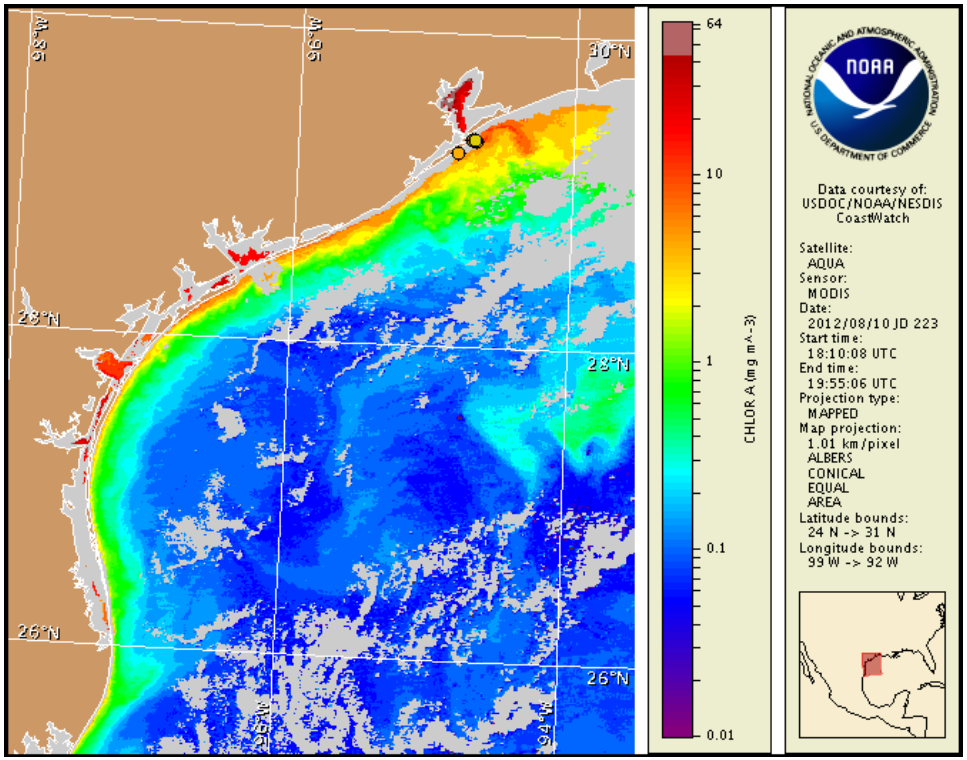
Monday, 13 August 2012

NOAA Ocean Service

NOAA Satellite and Information Service

NOAA National Weather Service

Last bulletin: Monday, August 6, 2012



Satellite chlorophyll image with possible HAB areas shown by red polygon(s). Cell concentration sampling data from August 3 to 12 shown as red (high), orange (medium), yellow (low b), brown (low a), blue(very low b), purple (very low a), pink (present), and green (not present). For a list of cell count data providers and a key to the cell concentration categories, please see the HAB-OFS bulletin guide:

http://tidesandcurrents.noaa.gov/hab/habfs_bulletin_guide.pdf

Detailed sample information can be obtained through the Texas Parks and Wildlife Department at:

http://www.tpwd.state.tx.us./landwater/water/environconcerns/hab/redtide/status.phtml

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To see previous bulletins and forecasts for other Harmful Algal Bloom Bulletin regions, visit the NOAA Harmful Algal Bloom Operational Forecast System bulletin archive:

http://tidesandcurrents.noaa.gov/hab/bulletins.html

Conditions Report

A harmful algal bloom of Karenia brevis has been identified along the Texas coast in the Galveston area. In the Galveston area, patchy moderate impacts are expected today through Wednesday. No additional impacts are expected at the coast in Texas today through Wednesday, August 15. Reports of dead fish have been received from alongshore the Galveston/Freeport region over the past few days. For information on area shellfish restrictions, contact the Texas Department of State Health Services.

Analysis

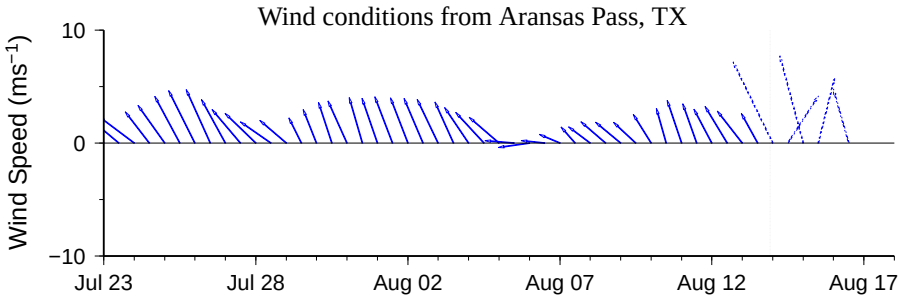
As of today, August 13, Texas bulletins will be issued twice weekly on Mondays & Thursdays due to current harmful algal bloom activity. The next bulletin will be issued on Thursday, August 16.

A harmful algal bloom of *Karenia brevis* has been identified in the Galveston region of Texas, with four samples collected in the Galveston Island area and from the mouth of Bolivar Roads Pass and Galveston Bay indicating concentrations ranging from 'low a' to 'medium' (8/12, TPWD). Reports of respiratory irritation and dead fish have been received from approximately 4 miles offshore Galveston. Dead fish were also reported from alongshore the Galveston, Freeport and Matagorda regions (8/10-12, TPWD).

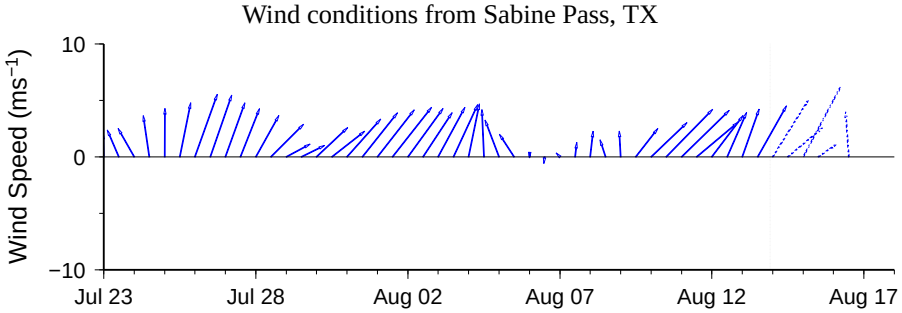
Recent MODIS imagery (8/10; shown left) is partially obscured by clouds along- and offshore from the Sabine Pass region to the Galveston region, limiting analysis. A patch of elevated to high chlorophyll (6 to >10 μg/L) is visible stretching 30 km north of the Bolivar Roads Pass region. A band of elevated chlorophyll (3-8 μg/L) is also visible along- and offshore from the Galveston to Aransas Pass region. Elevated chlorophyll is not necessarily indicative of the presence of *K. brevis* and could also be due to the resuspension of benthic chlorophyll and sediments along the coast.

Forecast models based on predicted near-surface currents indicate a maximum bloom transport from coastal sample locations of 60 km north from the Galveston region and a potential transport of 40 km north from the Port Aransas region from August 10-16.

Kavanaugh, Derner



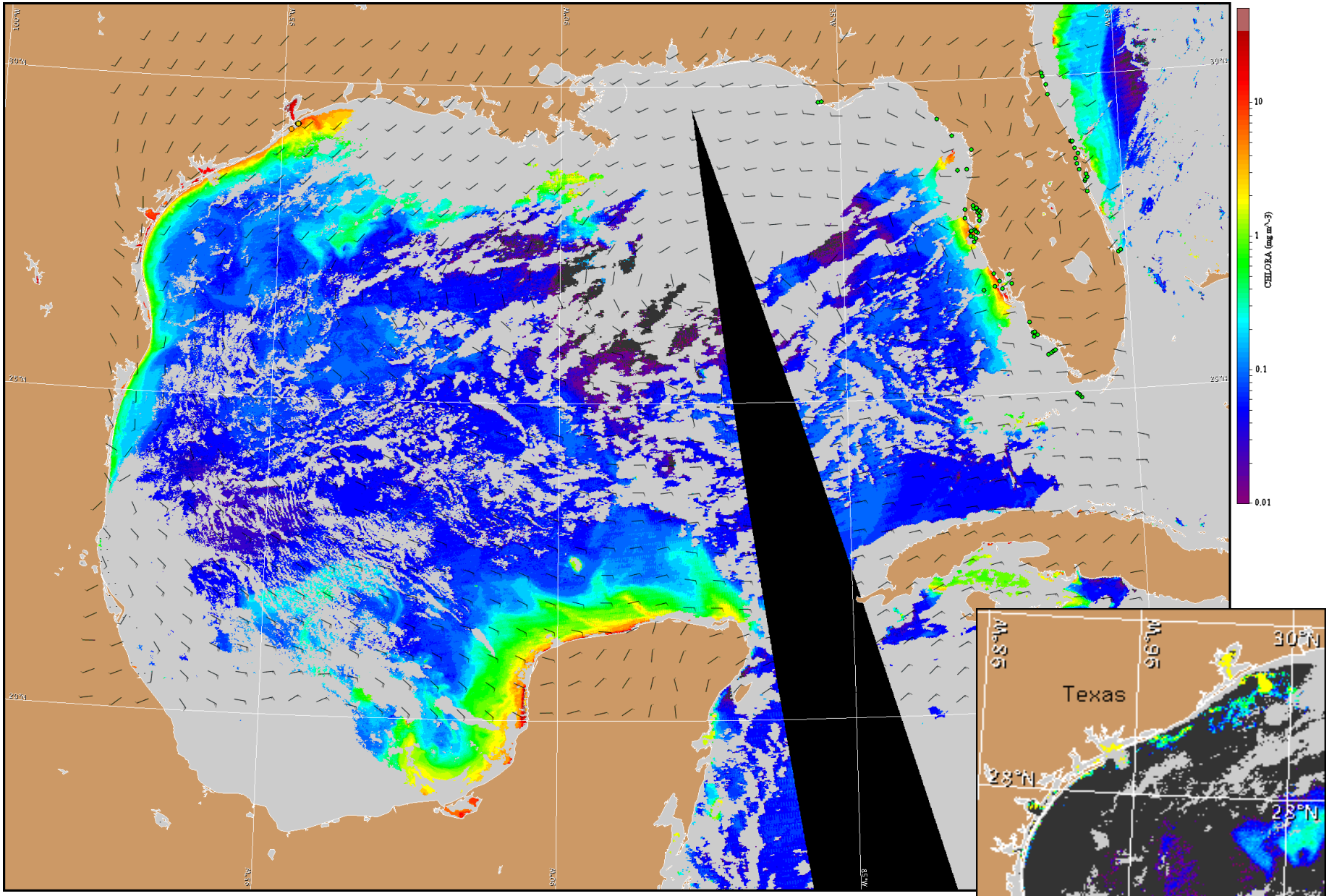
Wind speed and direction are averaged over 12 hours from buoy measurements. Length of line indicates speed; angle indicates direction. Red indicates that the wind direction favors upwelling near the coast. Values to the left of the dotted vertical line are measured values; values to the right are forecasts. Wind observation and forecast data provided by NOAA's National Weather Service (NWS).



Wind Analysis

Port Aransas: South winds (10-15 kn, 5-8 m/s) today through Tuesday. South to south-east winds (10-20 kn, 5-10 m/s) Wednesday.

Galveston: Southwest winds (10-15 kn) today. Southwest to south winds (5-15 kn, 3-8 m/s) Tuesday. South winds (5-15 kn) Wednesday.



Satellite chlorophyll image and forecast winds for August 14, 2012 12Z with cell concentration sampling data from August 3 to 12 shown as red (high), orange (medium), yellow (low b), brown (low a), blue(very low b), purple (very low a), pink (present), and green (not present). For a list of cell count data providers and a key to the cell concentration categories, please see the HAB-OFS bulletin guide:
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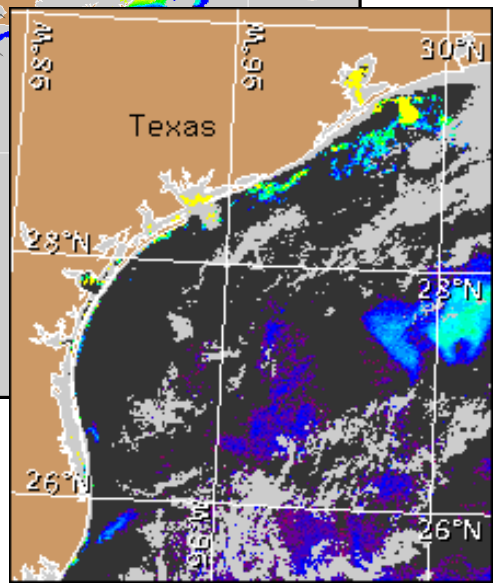

Verified and suspected HAB areas shown in red. Other areas of high chlorophyll concentration shown in yellow (see p. 1 analysis for interpretation).